

ABSTRACT OF THE DISCLOSURE

A refrigerating machine oil for a carbon dioxide  
 refrigerant according to the invention is a  
 refrigerating machine oil comprising polyalkylene  
 glycol represented by the following general formula  
 (1):



[where  $R^1$  represents a residue of an organic compound  
 having a hydroxyl group, from which the hydroxyl group  
 has been removed,  $R^2$  an alkylene group, and  $m$  and  $n$   
 respective integers], wherein a number average  
 molecular weight of the polyalkylene glycol is not less  
 than 500 nor more than 5000, wherein a rate of ethylene  
 group among the alkylene group in the polyalkylene  
 glycol is more than 0 and not more than 80 mol%, and  
 wherein a rate of molecules in which the alkylene group  
 bonded to a terminal hydroxyl group in the polyalkylene  
 glycol is an ethylene group, is not more than 20 mol%.